

## PATENT COOPERATION TREATY

PCT Rec'd PCT/PTO 13 MAY 2005

INTERNATIONAL PRELIMINARY EXAMINATION REPORT  
(PCT Article 36 and Rule 70)INTERNATIONAL PRELIMINARY EXAMINATION REPORT  
13 SEP 2004  
WIPO  
PCT

Applicant's or agent's file reference 77402-100	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/IB 03/06390	International filing date (day/month/year) 18.11.2003	Priority date (day/month/year) 18.11.2002
International Patent Classification (IPC) or both national classification and IPC C12N15/82		
Applicant PERFORMANCE PLANTS, INC.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
  - This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).
 These annexes consist of a total of sheets.
3. This report contains indications relating to the following items:
  - I  Basis of the opinion
  - II  Priority
  - III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - IV  Lack of unity of invention
  - V  Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - VI  Certain documents cited
  - VII  Certain defects in the international application
  - VIII  Certain observations on the international application

Date of submission of the demand 18.06.2004	Date of completion of this report 14.09.2004
Name and mailing address of the International preliminary examining authority:   European Patent Office - Glitschner Str. 103 D-10958 Berlin Tel. +49 30 25901 - 0 Fax: +49 30 25901 - 840	Authorized Officer  De Kok, A Telephone No. +49 30 25901-314



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I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-70 as originally filed

**Claims, Numbers**

1-61 as originally filed

**Drawings, Sheets**

1/5-5/5 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description, pages:
- the claims, Nos.:
- the drawings, sheets:

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5.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	1-61
	No: Claims	
Inventive step (IS)	Yes: Claims	1-61
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-61
	No: Claims	

2. Citations and explanations

**see separate sheet**

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Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. **Reference** is made to the following document:

D1: WO 02/16655 A (SYNGENTA PARTICIPATIONS AG ; SCRIPPS RESEARCH INST (US)) 28 February 2002

2. **Novelty and inventive step** (Articles 33(2) and (3) PCT):

2.1 The document D1 is regarded as being the closest prior art to the subject-matter of claim 1 and discloses (see abstract, claim 144 and seq.id.no. 4755) part of seq.id. no. 5 (nucleotides 1-487) and seq.id.no. 4 (nucleotides 1-282). Since D1 does not disclose the complete sequences identified by seq.id. no. 5 or 4, the subject-matter of **claim 1** is therefore new.

2.2 The problem to be solved by the present invention may be regarded as the identification of plant promoters which have specific expression characteristics (as compared to constitutive promoters) The solution to this problem proposed in **claim 1** of the present application is the isolation of the hydroxypyruvate reductase (HPR) promoter from *Arabidopsis*, specific for aerial tissue (seq.id.no. 5) as well as a truncated version thereof (seq.id.no.4), which is inducible by light or environmental (drought) stress. This solution is considered as involving an inventive step because D1 does neither indicate nor suggest the presence of such a promoter in the disclosed sequence.

2.3 **Claims 2-61** are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

3. **Clarity** (Articles 6 PCT):

3.1 **Claims 5 and 6** are in fact dependent on claim 1, as they encompass all the features of this claim.

3.2 **Claims 15 and 25** do not meet the requirements of Article 6 PCT in that the

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matter for which protection is sought is not clearly defined. The claims attempt to define the subject-matter in terms of the result to be achieved (i.e. "...capable of altering an agronomic trait..."), which merely amounts to a statement of the underlying problem, without providing the technical features necessary for achieving this result.